TECHNISCHE UNIVERSITÄT DRESDEN

DRESDEN concept

Department of Computer Science Institute for System Architecture, Chair for Computer Networks

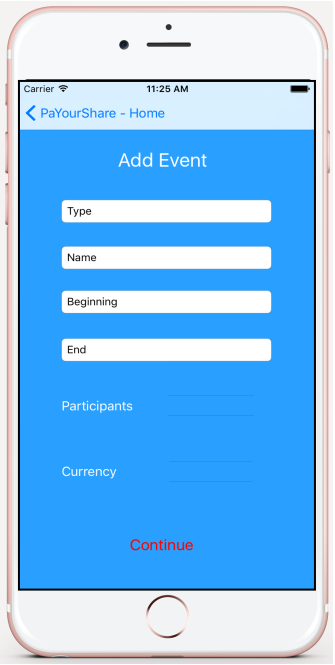
# Application Development for Mobile and Ubiquitous Computing

## Seminar Task

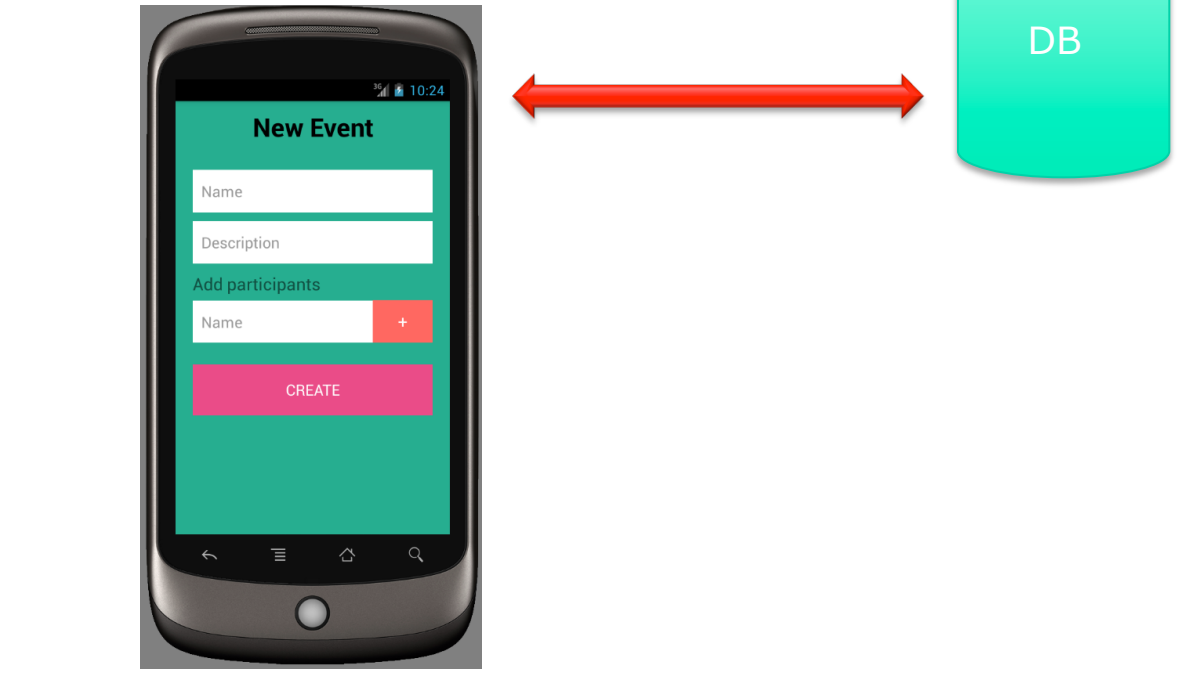
## Adaptation Concept Presentation

Group No. 2
Team: EVRARD-PION

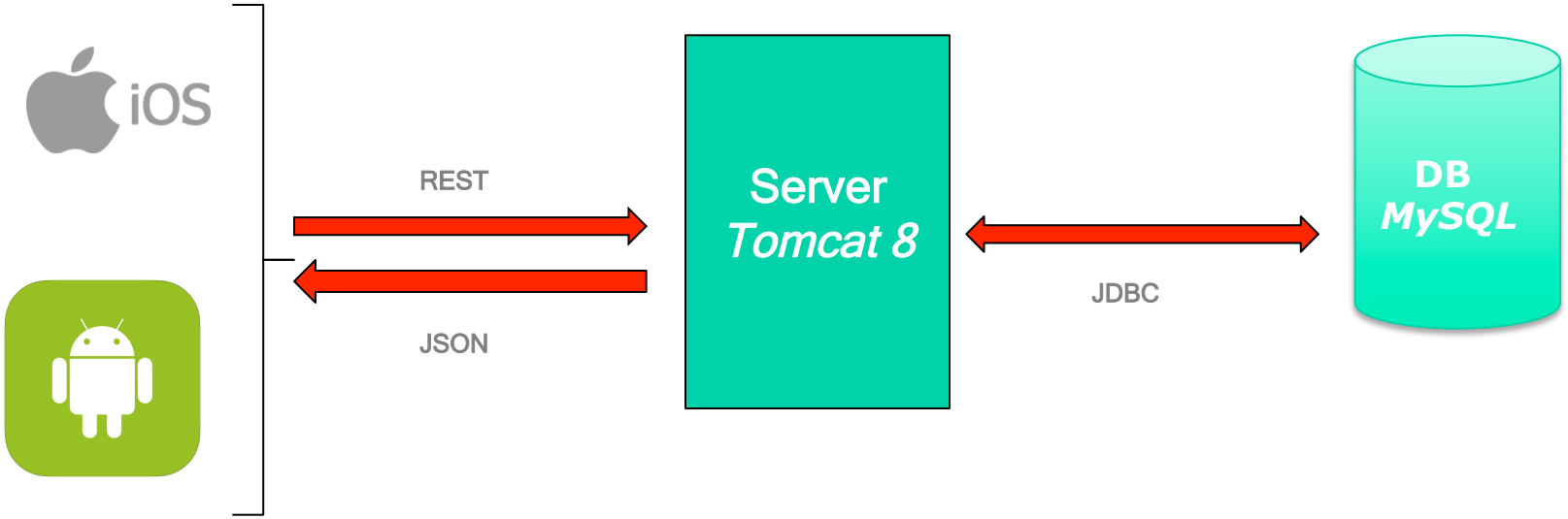
# Application Scenario




User 1




User 2




Xamarin

# Challenges

- **Multiplatforms :**
  - App usable on iOS and Android,
  - Xamarin + Android Studio,

- **Offline Challenge :**
  - Detect when the device is connected to the Web or not,
  - Use of cached or updated date depending on the current connection,

- **Usability challenge :**
  - Minimize efforts for user,
  - Keep good interface by adapting layout.

- Offline Mode (Account required) :
  - Create event and expenses,
  - Simple calculation,

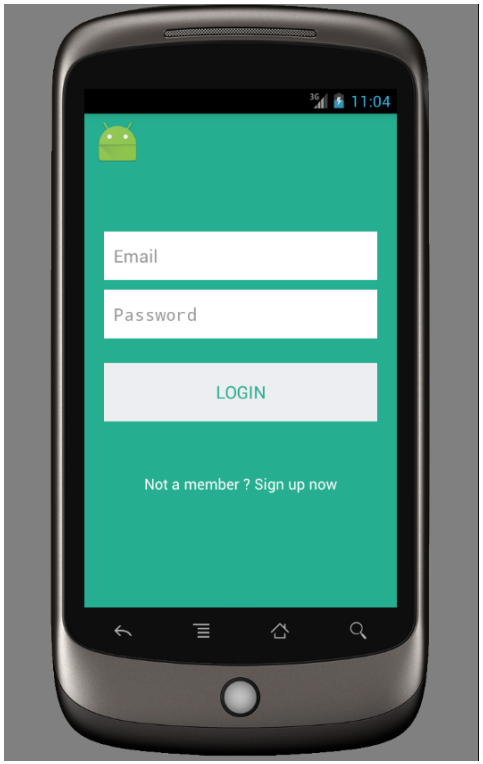
- Online Mode :
  - Synchronisation when app is launched and closed,
  - Pop Up when connection lost.

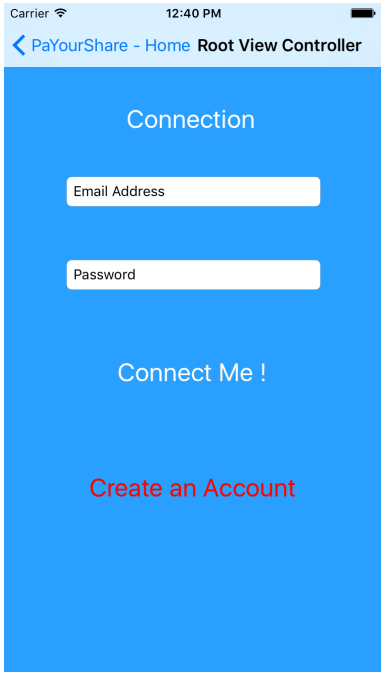
➔ *Adapt the app depending on the connection of the device,*
➔ *API to detect the connection and deactivate/activate functions of the app (Reachability on iOS or NetworkInfo on Android).*

- Keeping a good interface :
  - Depending on the phone, the app should automatically adapt to the layout,
  - Work on a large amount of smartphone.

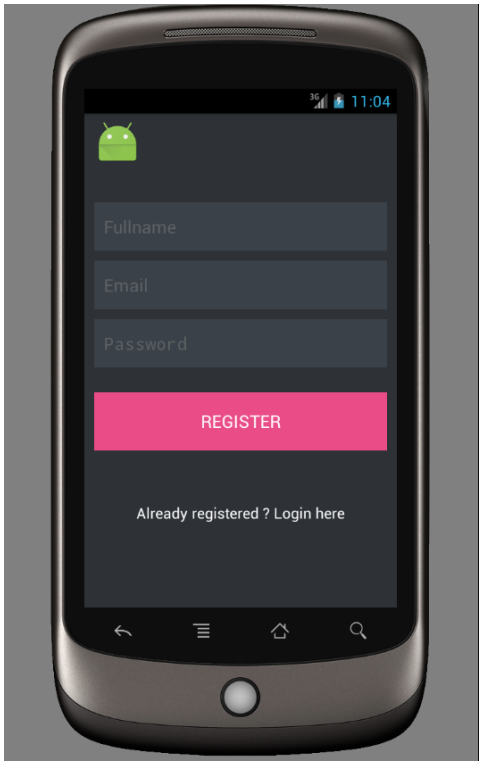
➔ *Adapt to screen size of the device,*
➔ *AutoLayout on iOS or DIP on Android.*

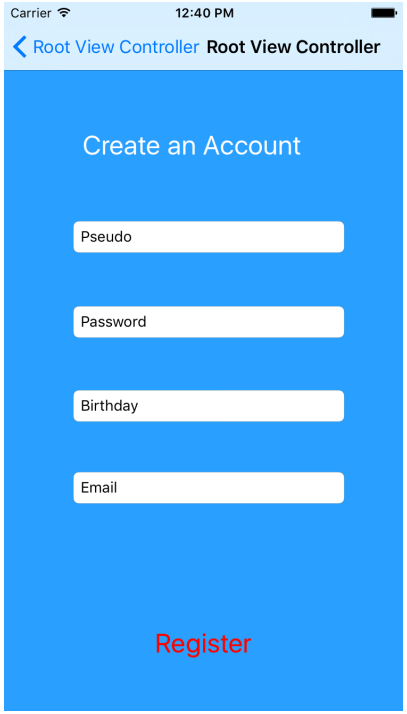
# Work Plan



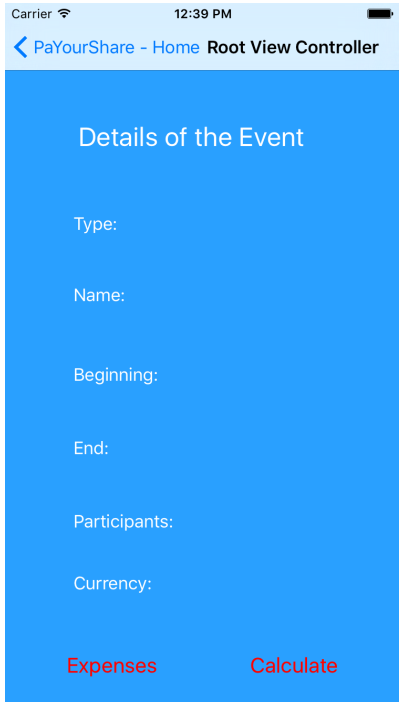

Connection



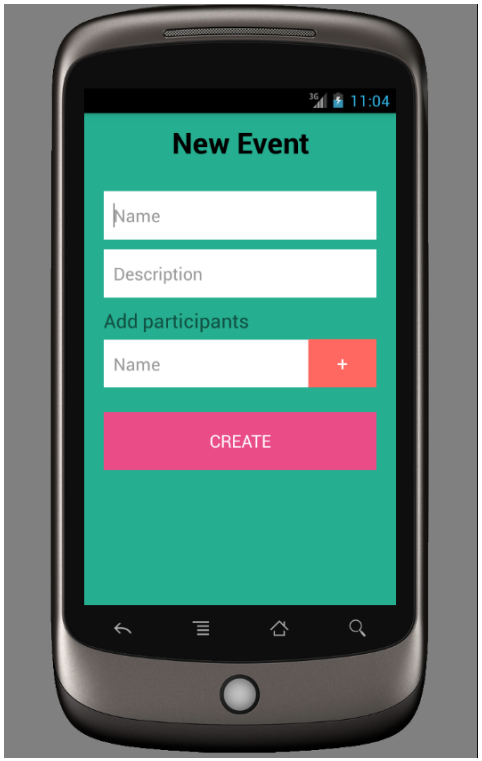



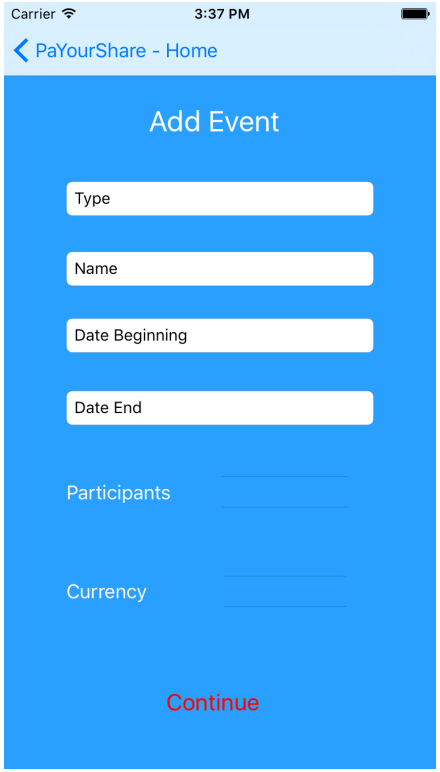

Create an account

# Work Plan



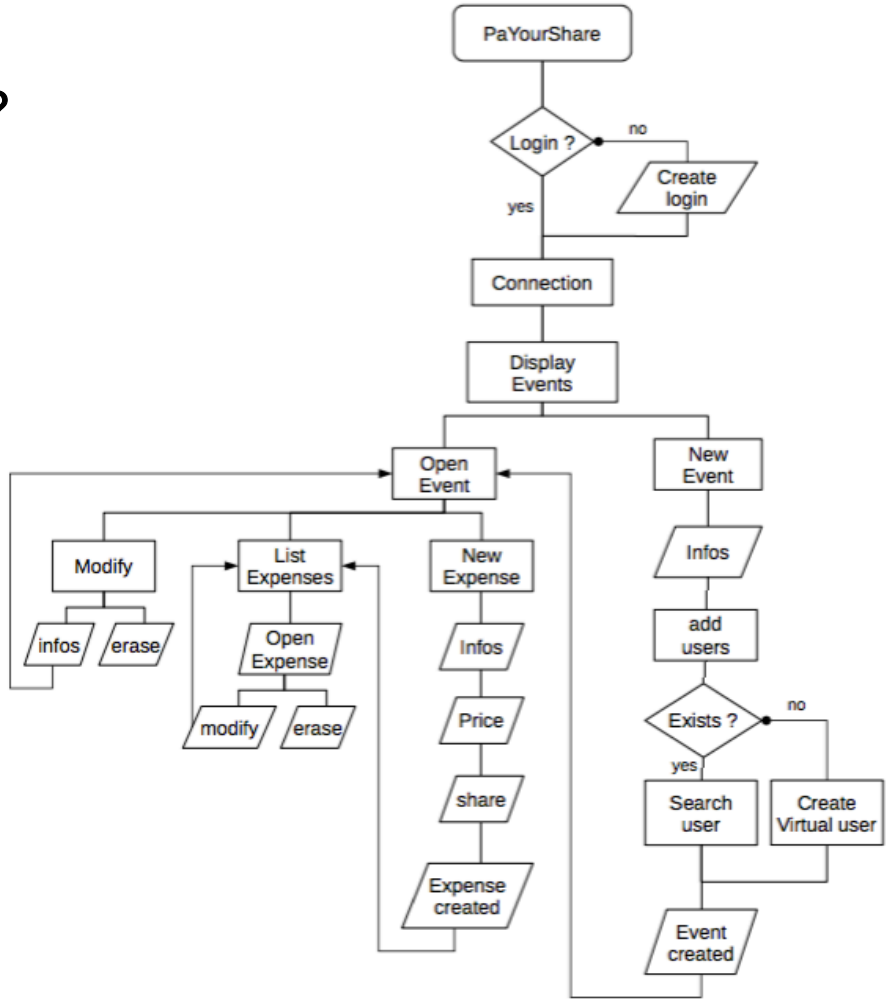

Event & Details




Add an Event

## What is next ?


PaYourShare
Login ?
no
Create login
yes
Connection
Display Events
Open Event
New Event
Modify
List Expenses
New Expense
Infos
add users
infos
erase
Open Expense
Infos
Exists ?
no
modify
erase
Price
yes
share
Search user
Create Virtual user
Expense created
Event created